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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,190	01/21/2004	Kia Silverbrook	MPA29US	2147

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER	
DICHT, RACHEL S	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,190	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Rachel Dicht	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3 November 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 4, 5, 6, 7, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US Pat. No. 6,439,908).

In regard to:

Claim 1:

Silverbrook et al. teaches a printhead assembly (10, Fig. 2), comprising: at least one printhead module (12, Fig. 2) comprising at least two printhead integrated circuits (chip 18, Fig. 3), each of which has nozzles (42, Fig. 7) formed therein for delivering printing fluid onto the surface of print media, a support member (28, Fig. 8) supporting and carrying the printing fluid for the at least two printhead integrated circuits (chip 18, Fig. 8), and an electrical connector (refer to column 3 lines 64-65) for connecting electrical signals to the at least two printhead integrated circuits; drive electronics arranged to control the printing operation of at least one of the at least two printhead integrated circuits via the electrical connector (refer to column 3 lines 59-65); a casing (14, Fig. 2) comprising a support frame on which the at least one printhead module and a plurality of mounting elements mounting the drive electronics are removably

arranged; a first connector arrangement (22, Fig. 8) at one end of the support fame connecting the drive electronics and printhead integrated circuits to a power supply and a data input (refer to column 3 lines 59-64); and a second connector arrangement (54, Fig. 3) at the other end of the support frame spring loading the plurality of mounting elements in the direction of the first connector arrangement (refer to column 4 lines 24-28).

Claim 2:

Silverbrook et al. teaches printhead assembly (10, Fig. 2) wherein: the drive electronics incorporates at least one controller arranged on at least one first printed circuit board (22, Fig. 8) for controlling the printing operation of the at least one of the printhead integrated circuits (refer to column 3 lines 49-50 and 59-65), the at least one first printed circuit board being removably mounted to at least one of the mounting elements (28, Fig. 8); the first connector arrangement is a second printed circuit board (18, Fig. 8) and the second connector arrangement is a third printed circuit board (54, Fig. 3); and the at least one first printed circuit board (22, Fig. 8) is engaged at the one end of the support frame (28, Fig. 8) by the second printed board (18, Fig. 8) and is engaged at the other end of the support frame by a spring portion formed in the third printed circuit board (refer to column 4 lines 24-28).

Claim 3:

Silverbrook et al. teaches a printhead assembly (10, Fig. 2), wherein the third printed circuit board (54, fig. 3) comprises termination connections for terminating a data signal traversing the at least one first printed circuit board from the second printed circuit board (refer to column 3 lines 6-18).

Claim 4:

Silverbrook et al. teaches a printhead system (10, Fig. 2), wherein the second printed circuit board (19, Fig. 8) carries a power terminal for connecting with the power supply and a data terminal for connecting with the data input (refer to column 3 lines 57-65).

Claim 5:

Silverbrook et al. teaches a printhead system (10, Fig. 2), further comprising a plurality of longitudinally extending electrical conductors (58 and 60, Fig. 14) connected to the second printed circuit board for delivering the power from the power supply to the drive electronics and printhead integrated circuits via the electrical connector (refer to column 3 lines 57-65).

Claim 6:

Silverbrook et al. teaches a printhead system (10, Fig. 2), wherein the third printed circuit board (54, Fig. 3) carries a power terminal for connecting with the power supply (refer to column 3 lines 57-65).

Claim 7:

Silverbrook et al. teaches a printhead system (10, Fig. 2), further comprising a plurality of longitudinally extending electrical conductors (58 and 60, Fig. 3) arranged as two groups of electrical conductors respectively connected to the second and third printed circuit boards (located on cover molding 28, Fig. 3) for delivering the power from the power supply to the drive electronics and printhead integrated circuits via the electrical connector at respective ends of the printhead assembly, respective ones of electrical conductors of the two groups of electrical conductors being connected together at abutting regions intermediate the ends of the printhead assembly (refer to Fig. 3)(refer to column 3 lines 57-65).

Claim 8:

Silverbrook et al. teaches a printhead assembly (10, Fig. 2), wherein the abutting regions (Fig. 3) of the individual electrical conductors (58 and 60, Fig. 3) are arranging in overlapping relationship (refer to column 5 lines 45-46).

Claim 9:

Silverbrook et al. teaches a printhead assembly (10, Fig. 2), wherein: the at least one printhead module (12, Fig. 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (chip 18, Fig. 8), the support

member (28, Fig. 8), the electrical connector (refer to column 3 lines 59-65), and at least one fluid distribution member (30, Fig. 8) mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel (72, Fig. 8) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (72, Fig. 8) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (refer to column 4 lines 41-44).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel Dicht whose telephone number is 571-272-8544. The examiner can normally be reached on 7:00 am - 3:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSD

October 18, 2005

10/27/05

MANISH S. SHAH
PRIMARY EXAMINER